

Organism and Part Check in



This Check-in is for:

A whole organism

Organism name:

Heterogeneous human epithelial colorectal adenocarcinoma cells/ Caco-2 Cell Line

What is the risk group of this organism?

Risk group One

What will you use this organism/part for?

We want to model the rate at which our genetically engineered bacterial culture (E. Coli Nissle) grows and colonizes the gut, and to characterize its expression of 5-HTP, a serotonin precursor that acts as an anti-depressant. Caco-2 Cell Line will be used to test the Microfluidics device after testing with the COS-7 cell line. Experiments will be carried to determine the optimum seeding cell density of the cells, and the time they need to adhere.

How will you acquire this organism/part?

Dr. Paul Sharp, who works with human intestinal epithelial cell models at Kings College London, has agreed to collaborate with us on this project, give us the Caco-2 cells we need from a culture collection, and advise us on the best ways to culture them.

Are you taking any additional safety precautions when you use this organism/part?

This cell line will be handled in a specialised lab at the UCL Biochemical Engineering building under the constant supervision of PhD students and Post-doctorates. Furthermore, all the work will be done under sterile laminar flow. Mycoplasma testing will be carried out as well.